

## CLAIMS

This listing of claims replaces all prior versions and listings of all claims in the application:

1. (Currently amended) A method of modifying a metallic surface comprising contacting the metallic surface with an asymmetric monolayer forming species having the formula:



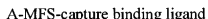
wherein

A is an attachment linker moiety;

MFS is a first monolayer forming species comprising the formula  $-(\text{CH}_2)_n-(\text{OCH}_2\text{CH}_2)_m$   
 $-(\text{CH}_2)_n(\text{OCH}_2\text{CH}_2)_m\text{OH}$ , wherein m is an integer from  $[[0]]$  1 to 10 $[[,]]$  and n is  
an integer from 7-20, and wherein when m=0, n is not 18; and

AG is an electroconduit forming species.

2. (Previously presented) A method according to claim 1 further comprising contacting said metallic surface with a biological species having the formula:



wherein

A is an attachment linker; and

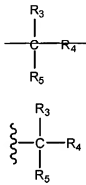
MFS is a second monolayer forming species.

3. (Original) A method according to claim 2 wherein said capture binding ligand is a nucleic acid.
4. (Previously presented) A method according to claim 2 wherein said capture binding ligand is a protein.
5. (Original) A method according to claim 1 wherein A is sulfur.
6. (Original) A method according to claim 1 wherein said metallic surface is gold.
7. (Previously presented) A method according to claim 1 wherein said first MFS is an insulator.

8-10. (Canceled)

11. (Previously presented) A method according to claim 1, 2, 3, 4, 5, 6, or 7 wherein said AG comprises an alkyl group from about 1 to 6 carbons.

12. (Currently amended) A method according to claim 1, 2, 3, 4, 5, 6 or 7 wherein said AG is branched, having the formula:



wherein  $R_3$  through  $R_5$  are independently selected from the group consisting of hydrogen, alkyl, aryl, alcohol, amine, amido, nitro, ether, ester, ketone, imino, aldehyde, alkoxy, carbonyl, halogen, sulfur containing moiety and phosphorus containing moiety.

13. (Currently amended) A method according to claim 12 wherein said AG is attached to said attachment linker via a  $(\text{CH}_2)_n$ - $(\text{CH}_2)_k$ - group, wherein  $[[n]]$   $\underline{k}$  is an integer from 0 to 4.

14. (Original) A method according to claim 12 wherein said AG is attached directly to said attachment linker.

15. (Currently amended) A method according to claim 11 wherein said AG is attached to said attachment linker via a  $(\text{CH}_2)_n$ - $(\text{CH}_2)_k$ - group, wherein  $[[n]]$   $\underline{k}$  is an integer from 0 to 4.

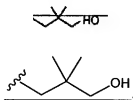
16. (Previously presented) A method according to claim 11 wherein said AG is attached directly to said attachment linker.

17. (Currently amended) A method according to claim 12, wherein said AG is

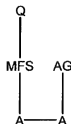




18. (Previously presented) A method according to claim 1, 2, 3, 4, 5, 6 or 7, wherein n is an integer from 7 to 16 and m is 1, 2, 3 or 4.
19. (Previously presented) A method according to claim 18, wherein m is 3 and n is 11.
20. (Previously presented) A method according to claim 11, wherein n is an integer from 7 to 16 and m is 1, 2, 3 or 4.
21. (Previously presented) A method according to claim 20, wherein m is 3 and n is 11.
22. (Previously presented) A method according to claim 12, wherein n is an integer from 7 to 16 and m is 1, 2, 3 or 4.
23. (Previously presented) A method according to claim 22, wherein m is 3 and n is 11.
24. (Currently amended) A method according to claim 23, wherein said AG is attached to said attachment linker via a  $(\text{CH}_2)_n$ - $(\text{CH}_2)_k$  group, wherein  $[[n]]$  k is an integer from 0 to 4.
25. (Previously presented) A method according to claim 23 wherein said AG is attached directly to said attachment linker.
26. (Currently amended) A method according to claim 23, wherein said AG is



27. (Previously presented) A method according to claim 1, wherein said MFS comprises the formula  $-(\text{CH}_2)_n-(\text{OCH}_2\text{CH}_2)_m\text{OH}$ .
28. (Currently amended) A method of modifying a metallic surface comprising contacting the metallic surface with an asymmetric monolayer forming species having the formula:



wherein

A is an attachment linker moiety;

MFS is a first monolayer forming species comprising the formula  $-(CH_2)_n-(CH_2)_n-$  wherein n is an integer selected from 7 to 20;

Q is a polyethylene glycol; and

AG is an electroconduit forming species.

29. (Previously presented) A method of claim 28, wherein said polyethylene glycol is selected from the group consisting of  $-OCH_2CH_2OH$ ,  $-(OCH_2CH_2)_2OH$ ,  $-(OCH_2CH_2)_3OH$ , and  $-(OCH_2CH_2)_4OH$  and n is an integer from 7 to 16.

30. (Previously presented) A method of claim 29, wherein said polyethylene glycol is  $-(OCH_2CH_2)_3OH$  and n is 11.

31. (New) A method of modifying a metallic surface comprising contacting the metallic surface with an asymmetric monolayer forming species having the formula:



wherein

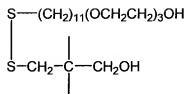
A is an attachment linker moiety;

MFS is a first monolayer forming species comprising the formula

$-(CH_2)_n(OCH_2CH_2)_mOH$ , wherein m is an integer from 0 to 10, n is an integer from 1 to 15; and

AG is an electroconduit forming species.

32. (New) A method of modifying a metallic surface comprising contacting the metallic surface with an asymmetric monolayer forming species having the formula:



33. (New) The method of claim 1, 28, 31 or 32 wherein the metallic surface is an electrode.
34. (New) The method of claim 33 wherein the electrode is a gold electrode.
35. (New) The method of claim 33 wherein the electrode is a gold electrode on a printed circuit board.